	m 3160-3 gust 2007)				.	FORM APPRO OMB NO. 1004	
•	•	STATE	S		İ	Expires: July 31	
	DEPARTMENT (OF THE	INTER	LIOR	r	5. Lease Serial No.	
	BUREAU OF LAN	ND MAN	AGEM	MENT		UTU-144867	
	APPLICATION FOR PERM	NIT TO E	RILL	OR REENTER	ľ	6. If Indian, Allottee or Tribe N	lame
					I	Ute Tribe	
						7. If Unit or CA Agreement, Na	ame and No.
1a.	Type of Work: X DRILL		REENI	TER	L	891008900A	
1b.	Type of Well: Oil Well X Gas Well	one	8. Lease Name and Well No. NBU 920-20F				
2.	Name of Operator					9. API Well No.	
	Kerr-McGee Oil	& Gas Ons	hore, LP			43.047.	40527
3a.	Address		3b. Pho	one No. (include area code)		10. Field and Pool, or Explorator	
	PO Box 173779			Raleen White		Natural Buttes Field	,
	Denver, CO 80217-3779		<u> </u>	720-929-6666			
4.	Location of well (Report location clearly and In accord	lance with t	any State	requirements.*) NAD 83	1	11. Sec.,T.,R.,M.,or Blk.and	Survey or Are
	1,794' FNL 2,199' FWL SE/4 NW			0,02316 Long, -109.69	9245		
	At proposed prod. zone 611 641 x 4430929 4	40.00	-109	.691728		20 T 9S R 20	E S.L.B. & M.
14.	Distance in miles and direction from the nearest town o	r post office	*			12. County or Parish	13. State
	Approximately 35 miles south of Vernal, Utah					Uintah	Utah
15.	Distance from proposed*			16. No. of acres in lease	17. Spac	ing Unit dedicated to this well	
	location to nearest	1,794'					
	property or lease line, ft.	-,,,,,		80.00	Uı	nit well	
10	(Also to nearest drlg. unit line, if any) Distance from proposed location*			10 December 10 and	20 DIA	(/DIA DINI	
10.	to nearest well, drilling, completed,	1,000'		19. Proposed Depth		I/BIA Bond No. on file	
	applied for, on this lease, ft.	1,000		10,800'	V	UYB000291	
21.	Elevations (Show whether DF. RT, GR, etc.)			22. Aproximate date work will st	tart*	23. Estimated duration	· · · · · · · · · · · · · · · · · · ·
	4,766 ' GR		KB	ASAP		10 days	
				24. Attachments			
The	following, completed in accordance with the requirement	nts of Onsh	ore Oil a		ad to this f	own.	
THE	tonowing, completed in accordance with the requirement	ins of Onsir	ore On a	nd das Order No. 1 shan de attach	led to uns i	orm.	
1.	Well plat certified by a registered surveyor.			4. Bond to cover the or	perations u	nless covered by existing bond or	n file(see
	A Drilling Plan.			item 20 above).			
3.	A Surface Use Plan (if the location is on National Fore		ands, the				
	SUPO shall be filed with the appropriate Forest Service	Omce).		authorized officer.	inc intorm	ation and/or plans as may be requ	uired by the a
25	Sindra		Nome				
<i>2</i> 3.	Signature Kallen White	,	Name (Printed/ Typed)	Raleen W	Thite Date 2-13-3	2019
Title	Ca Daguleton, Anglust		<u> </u>	E-mail:		raleen.white@anadarko.co	m
	Sr Regulatory Analyst			794		700 000 6666	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Name (Printed/ Typed)

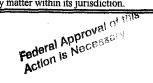
Office

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to approximent or agree of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* (Instructions on page 2)

Title



ENVIRONMENTAL MANAGER

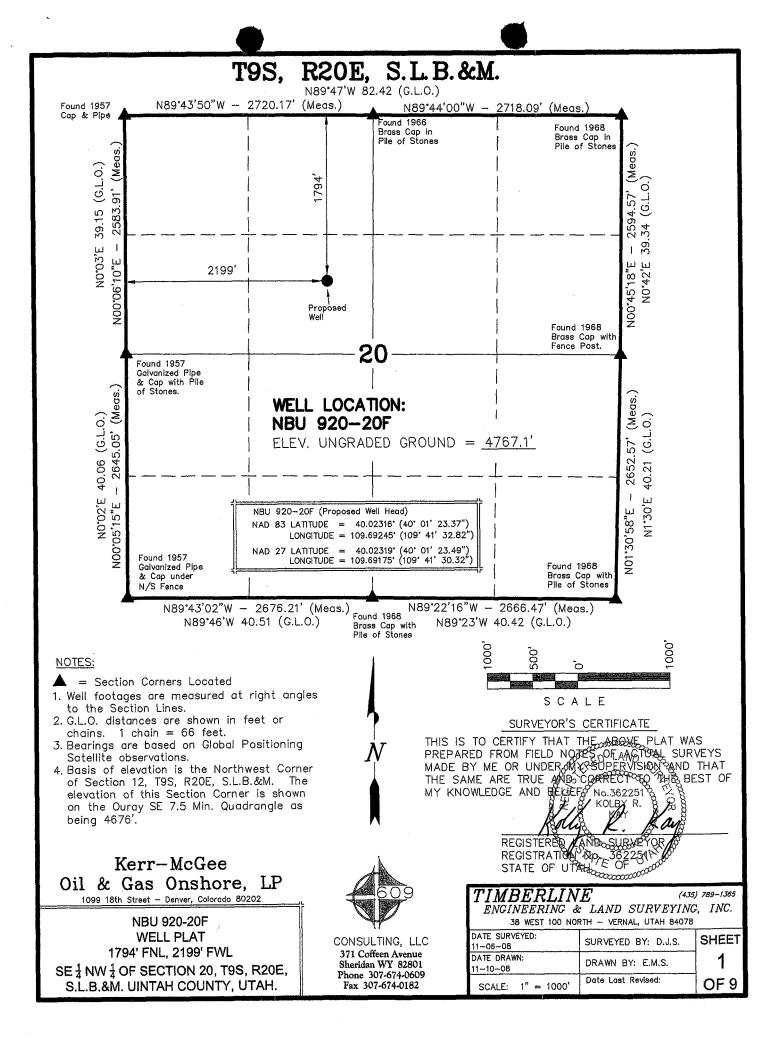
Phone:

FEB 17 2009

03-02-09

720-929-6666

Date



NBU 920-20F SENW Sec. 20, T9S R20E UINTAH COUNTY, UTAH UTU-144867

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1.-2. Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta	0 - Surface	
Green River	1,748'	
Birds Nest	1,980'	Water
Mahogany	2,488'	Water
Wasatch	5,216'	Gas
Mesaverde	8,717'	Gas
MVU2	9,686'	Gas
MVL1	10,114'	Gas
TD	10,800'	

3. Pressure Control Equipment (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP. See attached drilling diagram.

5. <u>Drilling Fluids Program</u>:

Please see the Natural Buttes Unit SOP.

6. Evaluation Program:

Please see the Natural Buttes Unit SOP.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,800' TD, approximately equals 6,897 psi (calculated at 0.64 psi/foot).

Maximum anticipated surface pressure equals approximately 4,521 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of
associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to
drill the surface holes are not typical of an air rig used to drill a producing hole in other
parts of the US. These are smaller in nature and designed to fit a KMG location. The typical
air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

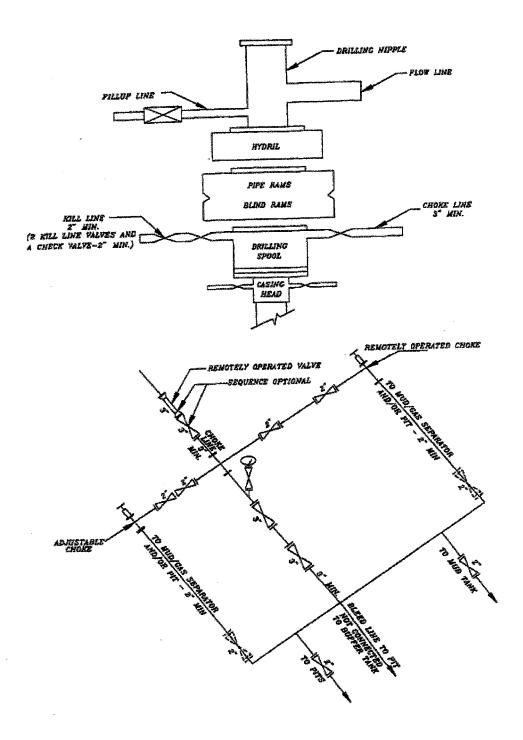
Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please see Natural Buttes Unit SOP.

EXHIBIT A NBU 920-20F



NBU 920-20F SENW Sec. 20 T9S R20E UINTAH COUNTY, UTAH UTU-144867

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. <u>Existing Roads</u>:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

Approximately ±1,800' of new access road is proposed. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. <u>Location of Existing Wells Within a 1-Mile Radius</u>:

Please refer to Topo Map C.

4. <u>Location of Existing & Proposed Facilities</u>:

Please see the Natural Buttes Unit SOP.

Refer to Topo Map D for the location of the proposed pipelines.

Variances to Best Management Practices (BMPs) Requested:

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow gray (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (Request is in lieu of filing Form 3160-5, after initial production).

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

Operator shall call the BIA for the seed mixture when the final reclamation occurs.

11. Surface/Mineral Ownership:

The well pad and access road are located on lands owned by:

Ute Indian Tribe P.O. Box 70 Fort Duchesne, Utah 84026 (435) 722-5141

The mineral ownership is listed below:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

12. Stipulations/Notices/Mitigation:

There are no stipulations or notices for this location.

13. Other Information:

A Class III archaeological survey has been performed and will be submitted upon receipt. The Paleo report is attached.

14. Lessee's or Operator's Representative & Certification:

Raleen White Sr. Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6666 Tommy Thompson
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond # W 46000004.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

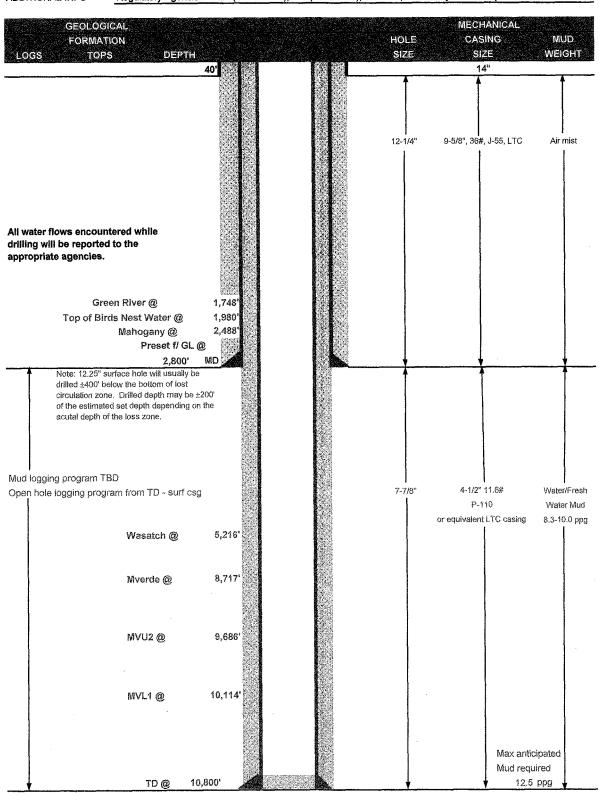
Raleen White 2\f3/2009

Date



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY	NAME KER	R-McGEE OIL	& GAS ON	SHORE LP		D	ATE	February	5, 2009		
WELL NAM	E NB	U 920-20F				TI	כ	10,800'	MD/TVD		
FIELD	Natural Butte	s	COUNTY	Uintah	STATE	Utah		ELEVATION	4,766' GL	KE	4,781'
SURFACE	LOCATION	SE/4 NW/4	1,794' FNL	2,199' FWL	Sec	20	T 9S	R 20E		BHL	Straight Hole
		Latitude:	40.023160	Longitud	de: -10	9.6924	50		NAD 83		
OBJECTIV	E ZONE(S)	Wasatch/Me	saverde								
ADDITIONA	AL INFO	Regulatory A	Agencies: B	LM (MINERAI	LS), BIA	(SURF	ACE),	UDOGM, Tri-	County Health De	ept.	







CASING PROGRAM

								Ĺ	ESIGN FACT	ORS
	SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	C	-40'							
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2800	36.00	J-55	LTC	0.76	1.54	5.72
								10,690	7,580	279,000
PRODUCTION	4-1/2"	0	to	10800	11.60	P-110	LTC	2.30	1.08	2.55

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

12.5 ppg) 0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP

4,521 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD =

12.5 ppg)

0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 6,897 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1,18
SURFACE			NOTE: If well will circulate water to sur	face, opti	on 2 will be	utilized	
Option 2	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
			+.25 pps Flocele + 3% salt BWOC				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
							P10947452580
PRODUCTION	ON LEAD	4,710'	Premium Lite II + 3% KCl + 0.25 pps	510	60%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,090'	50/50 Poz/G + 10% salt + 2% gel	1700	60%	14.30	1.31
			+.1% R-3		Sept.		

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.

PRODUCTION

Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

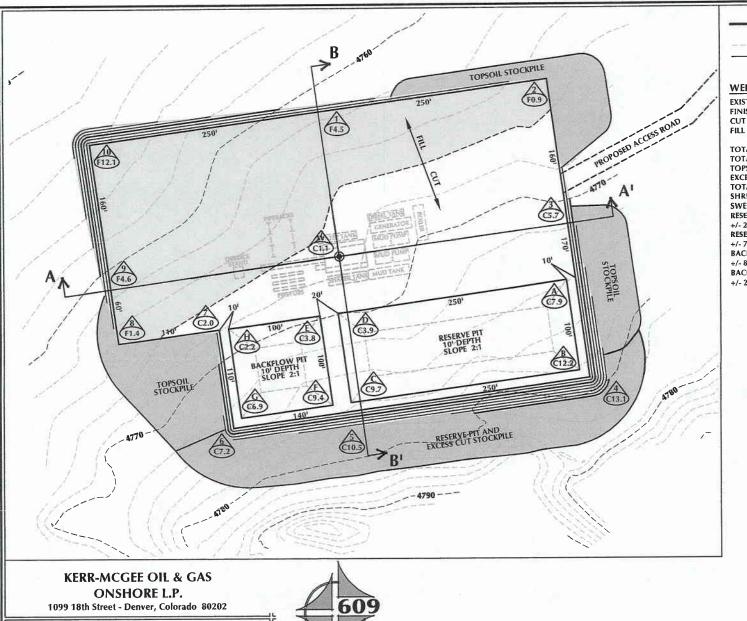
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

John Merkel / Lovel Young

DRILLING ENGINEER:		DATE:	
	John Huycke / Grant Schluender		
DRILLING SUPERINTENDENT:		DATE:	

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



WELL PAD LEGEND

WELL LOCATION **EXISTING CONTOURS (2' INTERVAL)** PROPOSED CONTOURS (2' INTERVAL)

WELL PAD NBU 920-20F QUANTITIES

EXISTING GRADE @ LOC. STAKE = 4,767.11 FINISHED GRADE ELEVATION = 4,766.01 CUT SLOPES = 1.5:1 FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 18,004 C.Y. TOTAL FILL FOR WELL PAD = 12,192 C.Y. TOPSOIL @ 6" DEPTH = 3,178 C.Y. EXCESS MATERIAL = 5,812 C.Y. **TOTAL DISTURBANCE = 3.94 ACRES** SHRINKAGE FACTOR = 1.10 SWELL FACTOR = 1.00 RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 25,880 BARRELS RESERVE PIT VOLUME +/- 7,185 CY BACKFLOW PIT CAPACITY (2' OF FREEBOARD) +/- 8,780 BARRELS **BACKFLOW PIT VOLUME** +/- 2,520 CY



HORIZONTAL 50

2' CONTOURS

Timberline 38 WEST 100 NORTH

(435) 789-1365 Engineering & Land Surveying, Inc. VERNAL, UTAH 84078

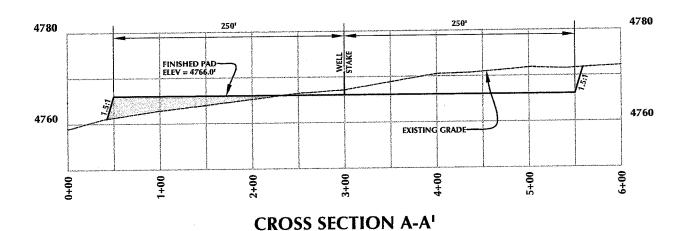
NBU 920-20F **WELL PAD - LOCATION LAYOUT** 1794' FNL, 2199' FWL SE1/4NW1/4, SECTION 20, T.9S., R.20E. S.L.B.&M., UINTAH COUNTY, UTAH

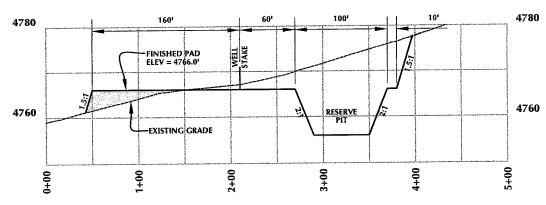


CONSULTING, LLC

371 Coffeen Avenue Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

Scale:	1"=100"	Date:	12/17/08	SHEET NO:	
REVISED):		BY DATE	2	2 OF 9





CROSS SECTION B-B¹

KERR-MCGEE OIL & GAS ONSHORE L.P.

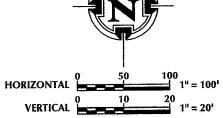
1099 18th Street - Denver, Colorado 80202

NBU 920-20F WELL PAD - CROSS SECTIONS 1794' FNL, 2199' FWL SE1/4NW1/4, SECTION 20, T.9S., R.20E. S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC 371 Coffeen Avenue Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

11		
Scale: 1"=100" Date: 12/17/08 SHEET NO:	: 1	
REVISED: BY DATE 3	3 OF 9	



Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

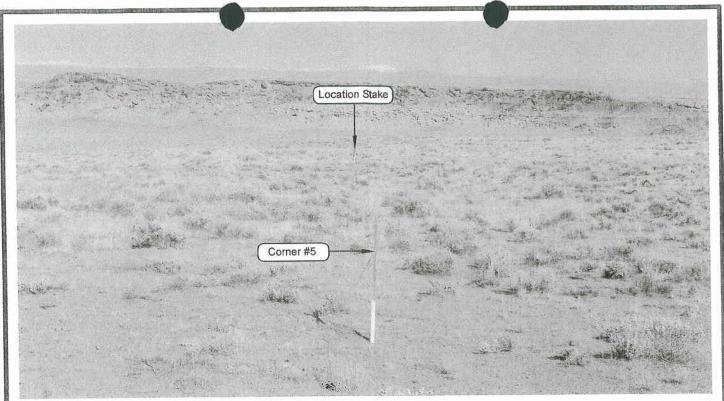


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

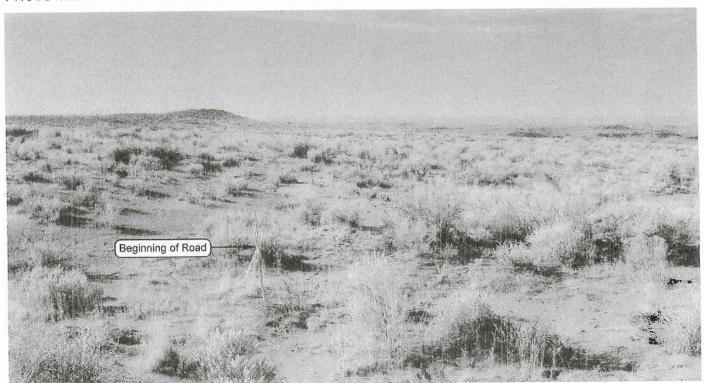


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHWESTERLY

Kerr-McGee Oil & Gas Onshore, LP

NBU 920-20F 1794' FNL, 2199' FWL $SE_{\frac{1}{4}}NW_{\frac{1}{4}}OF$ SECTION 20, T9S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.



CONSULTING, LLC 371 Coffeen Avenue Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

LOCATION	PHOTOS
----------	--------

DATE TAKEN: 11-06-08 DATE DRAWN: 11-10-08

TAKEN BY: D.J.S.

DRAWN BY: E.M.S.

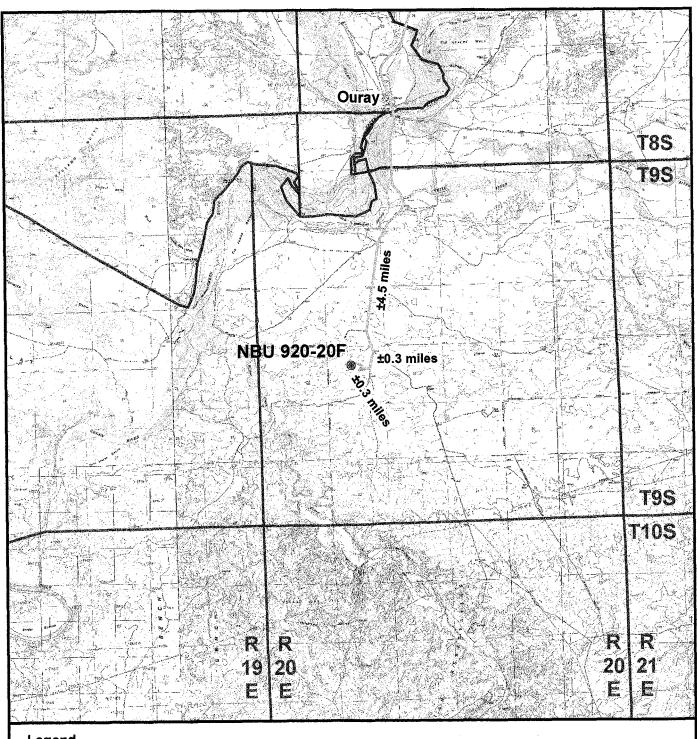
REVISED:

Timberline

(435) 789-1365

SHEET 4 OF 9

Engineering & Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078



Legend

- Proposed NBU 920-20F Well Location
- Access Route Proposed

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street, Denver, Colorado 80202

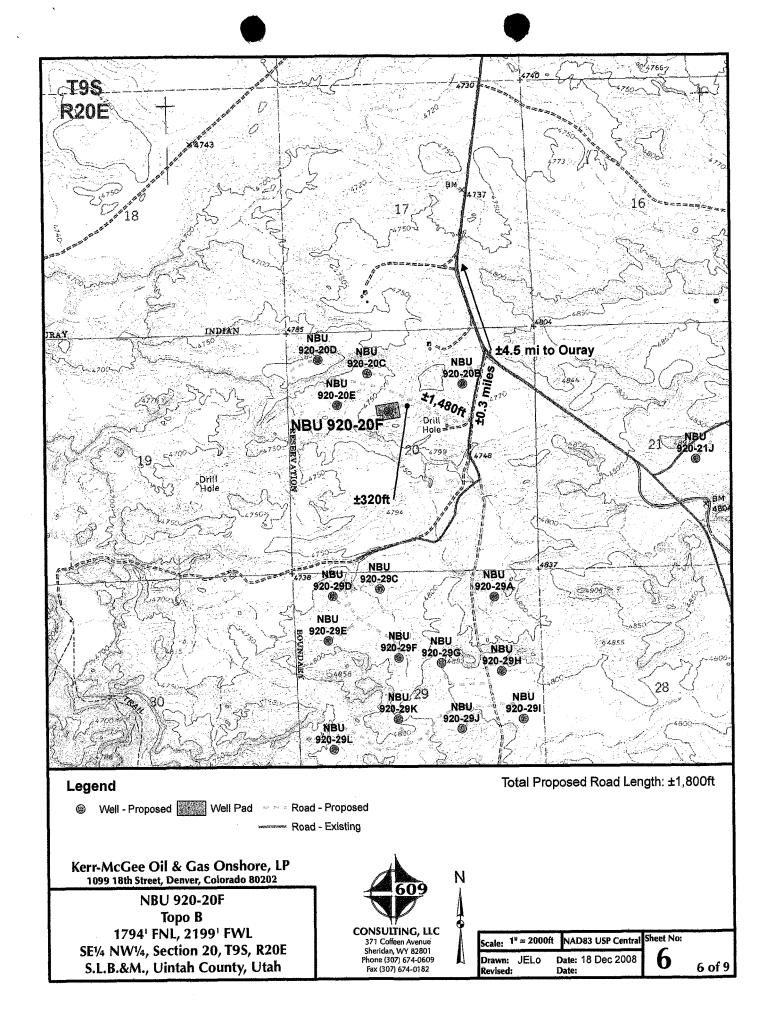
NBU 920-20F Topo A 1794' FNL, 2199' FWL SE'4 NW'4, Section 20, T9S, R20E S.L.B.&M., Uintah County, Utah

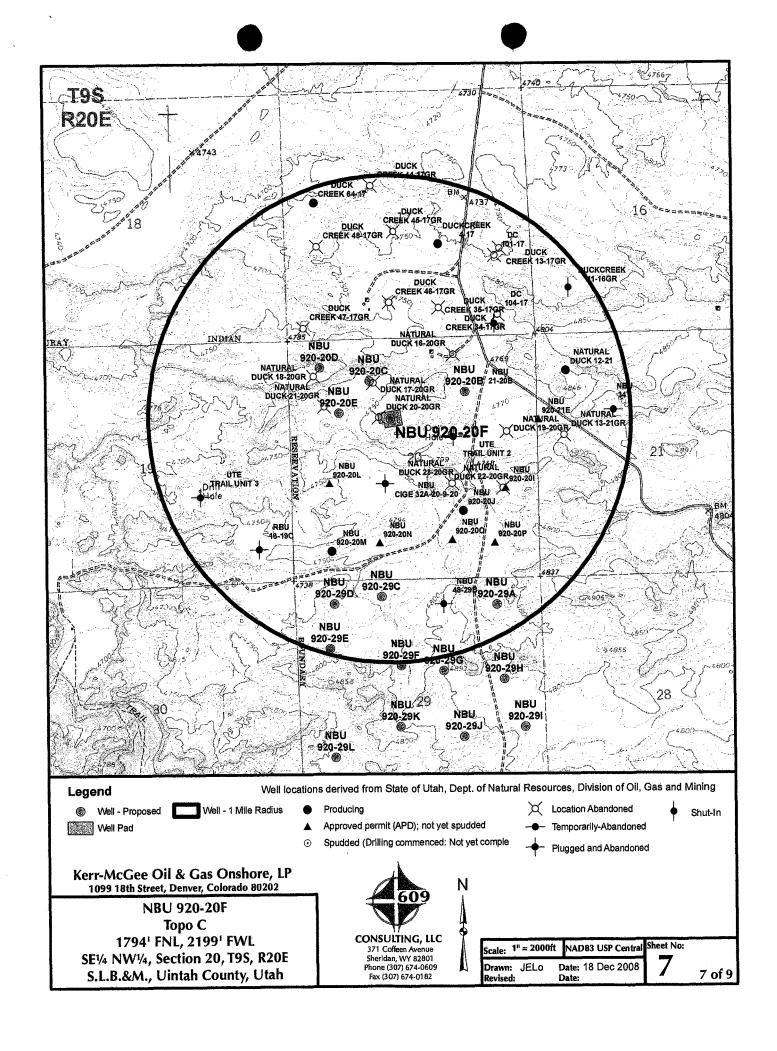


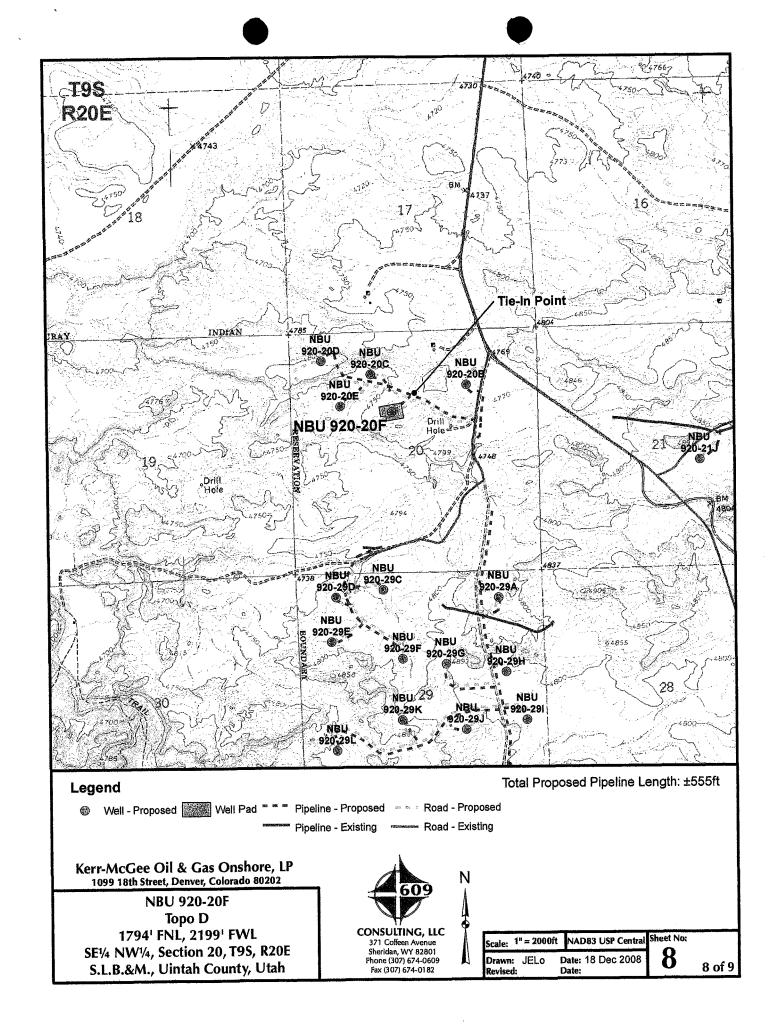
CONSULTING, LLC 371 Coffeen Avenue Sheridan, WY 82801 Phone (307) 674-0609 Fax (307) 674-0182

Scale:	1:100,000	NAD83 USP Central	She
Drawn:	JELo	Date: 18 Dec 2008	

5 5 of 9







Kerr-McGee Oil & Gas Onshore, LP NBU 920-20F Section 20, T9S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 4.5 MILES TO THE INTERSECTION OF THE WILD HORSE BENCH ROAD (A CLASS D COUNTY ROAD). EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG THE WILD HORSE BENCH ROAD APPROXIMATELY 0.3 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHWESTERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 1,800 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 35.8 MILES IN A SOUTHERLY DIRECTION.

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Gathering Pipeline, Well Pads, Access Roads, and Pipelines for "NBU #920-20C, D, E, & F" & "NBU #920-29K, L, J, & O" (Sec. 20 & 29, T 9 S, R 20 E)

Ouray Topographic Quadrangle Uintah County, Utah

December 17, 2008

Prepared by Stephen D. Sandau Paleontologist for Intermountain Paleo-Consulting P. O. Box 1125 Vernal, Utah 84078

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by Bruce Pargeets of the Ute Indian Tribe and by Larry Love, Director of the Ute Indian Tribe's Energy and Minerals Department, a paleontological reconnaissance survey of Kerr McGee's proposed gathering pipeline, well pads, access roads, and pipelines for "NBU #920-20C, D, E, & F" and "NBU #920-29K, L, J, & O" (Sec. 20 & 29, T 9 S, R 20 E) was conducted by David Alderks on December 9, 2008. The survey was conducted under the Ute Indian Tribe Business License FY 2009, #A09-1308 and the accompanying Access Permit (effective 10/15/2008 through 3/31/2009). This survey to locate, identify and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

- 1) The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321.et. Seq., P.L. 91-190);
- 2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579) and
- 3) The National Historic Preservation Act.16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- Class 1 Very Low. Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- Class 2 Low. Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial and colluvial deposits etc...)
- Class 3 Moderate or Unknown. Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
 - Class 3a Moderate Potential. The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.
 - o Class 3b Unknown Potential. Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but

little information about the paleontological resources of the unit or the area is known.

- Class 4 High. Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
 - o Class 4a Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
 - o Class 4b Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- Class 5 Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
 - o Class 5a Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
 - o Class 5b Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

LOCATION

Kerr McGee's proposed gathering pipeline, well pads, access roads, and pipelines for "NBU #920-20C, D, E, & F" and "NBU #920-29K, L, J, & O" (Sec. 20 & 29, T 9 S, R 20 E) are located on Ute Indian Reservation land about 1-2 miles east of Willow Creek, approximately 5-6 miles southwest of the White River, and some 5-6 miles south of Ouray, Utah. The project area can be found on the Ouray 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) ranging in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992) and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded, coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929) and the Myton Member previously regarded as the Uinta C.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments inter-fingering with over-bank deposits of silt, and mudstone and westward flowing channel sands and fluvial clays, muds, and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well-known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

The Duchesne River Formation of the Uinta Basin in northeastern Utah is composed of a succession of fluvial and flood plain deposits composed of mud, silt, and sandstone. The source area for these late Eocene deposits is from the Uinta Mountains indicated by paleocurrent data (Anderson and Picard, 1972). In Peterson's (1931c) paper, the name "Duchesne Formation" was applied to the formation and it was later changed to the "Duchesne River Formation" by Kay (1934). The formation is divided up into four members: the Brennan Basin, Dry Gulch Creek, LaPoint, and Starr Flat (Anderson and Picard, 1972). Debates concerning the Duchesne River Formation, as to whether its age was late Eocene or early Oligocene, have surfaced throughout the literature of the last century (Wood et al., 1941; Scott 1945). Recent paleomagnetostratigraphic work (Prothero, 1996) shows that the Duchesne River Formation is late Eocene in time.

FIELD METHODS

In order to determine if the proposed project area contained any paleontological resources, a reconnaissance survey was performed. An on-site observation of the proposed areas undergoing surficial disturbance is necessary because judgments made from topographic maps alone are often unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces and are of particular importance.

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual wells and their associated pipelines and access roads.

NBU #920-20C

The proposed pipeline, access road, and well pad are located in the NE/NW quarter-quarter section of Sec. 20, T 9 S, R 20 E (Figure 1). The access road and pipeline divert from the pipeline and access road to "NBU 920-20D" and travel to the north about 400 feet to the well pad. The pipeline and access road start in sand dunes and transitions into a gray mudstone. The well pad is located in a relatively flat mudstone area surrounded on the north by hills capped by red and tan mudstones. Several fragments of turtle shell were found on the well pad and access road.

NBU #920-20D

The proposed pipeline and access road start in the SE/NE quarter-quarter section of Sec. 20, T 9 S, R 20 E and run generally to the east for about 0.75 mile to the well pad located in the NW/NW quarter-quarter section of Sec. 20 (Figure 1). The access road and pipeline traverse a gray mudstone at the beginning of the route and then climb a small hill of mudstone crossing in a saddle between two maroon sandstone caped ridges. The access road and pipeline cross a small half basin before climbing a small hill comprised of sand dunes. The route then crosses a large mudstone flat, before making a final climb up a large hill layered with several tan and red (about 50 feet thick) sandstone bodies. The road then turns to the east and travels to the well pad in the NW/NW quarter-quarter section of Sec. 20. The well pad is located on a sandy, gray mudstone and is relatively flat and covered in sagebrush. Turtle shell fragments were discovered in several locations. These fossil fragments were two small and fragmented to determine the number or type of turtles.

NBU #920-20E

The proposed pipeline, access road, and well pad are located in the SE/NW quarter-quarter section of Sec. 20, T 9 S, R 20 E (Figure 1). The proposed pipeline and access road are located on a gray mudstone and also partially in a small wash. A few low lying hills are present on either side of the proposed pipeline and access road. The well pad is located on a gray mudstone surrounded by a few small hills. No fossils were found.

NBU #920-20F

The proposed pipeline, access road, and well pad are located in the SE/NW quarter-quarter section of Sec. 20, T 9 S, R 20 E (Figure 1). The proposed access road and pipeline are short and are situated over sand dunes which cover a gray mudstone. The well pad is located on a small hill partially comprised of gray mudstone and sand dunes. A tan sandstone outcrop was seen on the southern edge of the well pad. No fossils were found.

NBU #920-29K

The proposed pipeline, access road, and well pad are located in the NE/SW quarter-quarter section of Sec. 29, T 9 S, R 20 E (Figure 1). The proposed pipeline and access road run north from the pipeline and access road for "NBU 920-29L" for about 300 feet. The access road and pipeline are in sand soil with a few out crops of tan, arkosic, fluvial sandstone covered in sagebrush and desert grass. The well pad is located on top of a sandstone outcrop in sandy soil supporting desert grasses and sagebrush. No fossils were found.

Onsite Change to NBU #920-29L

The proposed onsite change to the pipeline starts in the NW/SE quarter-quarter section of Sec. 29, T 9 S, R 20 E and travels for about half a mile to the SE/SW quarter-quarter section of Sec. 29 (Figure 1). The pipeline traverses sand dunes vegetated with desert grasses and sagebrush. No fossils were found.

NBU #920-29J

The proposed pipeline, access road, and well pad are located in the NW/SE quarter-quarter section of Sec. 29, T 9 S, R 20 E (Figure 1). The proposed access road travels up hill over a sand dune. The proposed well pad is located on sand dunes vegetated with sagebrush and grass. A

tan sandstone outcrop was seen on the western edge of the well pad. A small drainage is located in the western part of the well pad. The proposed pipeline is located on the western edge of the well pad and is located in the sand dune field. No fossils were found.

NBU #920-29O

The proposed pipeline, access road, and well pad are located in the SW/SE quarter-quarter section of Sec. 29, T 9 S, R 20 E (Figure 1). The proposed access road and pipeline are short traveling west for about 150 feet. They traverse a gray mudstone that is slightly reworked by wind and water. The proposed well pad is located on mudstone with a sandstone ridge to the north of the well pad. No fossils were found.

Gathering Pipeline Sec. 29

The proposed gathering pipeline runs along an existing road from the NE/SE quarter-quarter section to the SE/SE section of Sec. 29, T 9 S, R 20 E. The proposed gathering pipeline travels across sand dunes, gray mudstones, and a few outcrops of tan sandstone covered in sagebrush and desert grasses. No fossils were found.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
"NBU #920- 20C" (Sec. 20, T 9 S, R 20 E)	The pipeline and access road start in sand dunes and transitions into a gray mudstone. The well pad is located in a relatively flat mudstone area surrounded on the north by hills capped by red and tan mudstones.	Several fragments of turtle shell were found on the well pad and access road. Class 3a
"NBU #920- 20D" (Sec. 20, T 9 S, R 20 E)	The access road and pipeline traverse a gray mudstone at the beginning of the route and then climb a small hill of mudstone crossing in a saddle between two maroon sandstone caped ridges. The access road and pipeline cross a small half basin before climbing a small hill comprised of sand dunes. The route then crosses a large mudstone flat, before making a final climb up a large hill layered with several tan and red (about 50 feet thick) sandstone bodies. The road then turns to the east and travels to the well pad in the NW/NW quarter-quarter section of Sec. 20. The well pad is located on a sandy, gray mudstone and is relatively flat and covered in sagebrush.	Turtle shell fragments were discovered in several locations. These fossil fragments were two small and fragmented to determine the number or type of turtles. Class 3a
"NBU #920- 20E" (Sec. 20, T 9 S, R 20 E)	The proposed pipeline and access road are located on a gray mudstone and also partially in a small wash. A few low lying hills are present on either side of the proposed pipeline and access road. The well pad is located on a gray mudstone surrounded by a few small hills.	No fossils were found. Class 3a

"NBU #920- 20F" (Sec. 20, T 9 S, R 20 E)	The proposed access road and pipeline are short and are situated over sand dunes which cover a gray mudstone. The well pad is located on a small hill partially comprised of gray mudstone and sand dunes. A tan sandstone outcrop was seen on the southern edge of the well pad.	No fossils were found. Class 3a
"NBU #920- 29K" (Sec. 29, T 9 S, R 20 E)	The access road and pipeline are in sand soil with a few out crops of tan, arkosic, fluvial sandstone covered in sagebrush and desert grass. The well pad is located on top of a sandstone outcrop in sandy soil supporting desert grasses and sagebrush.	No fossils were found. Class 3a
"Onsite Change to NBU #920- 29L" (Sec. 29, T 9 S, R 20 E)	The pipeline traverses sand dunes vegetated with desert grasses and sagebrush.	No fossils were found. Class 3a
"NBU #920- 29J" (Sec. 29, T 9 S, R 20 E)	The proposed access road travels up hill over a sand dune. The proposed well pad is located on sand dunes vegetated with sagebrush and grass. A tan sandstone outcrop was seen on the western edge of the well pad. A small drainage is located in the western part of the well pad. The proposed pipeline is located on the western edge of the well pad and is located in the sand dune field.	No fossils were found. Class 3a
"NBU #920- 290" (Sec. 29, T 9 S, R 20 E)	The proposed access road and pipeline traverse a gray mudstone that is slightly reworked by wind and water. The proposed well pad is located on mudstone with a sandstone ridge to the north of the well pad.	No fossils were found. Class 3a
"Gathering Pipeline Sec. 29" (Sec. 29, T 9 S, R 20 E)	The proposed gathering pipeline travels across sand dunes, gray mudstones, and a few outcrops of tan sandstone covered in sagebrush and desert grasses.	No fossils were found. Class 3a

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed gathering pipeline, well pads, access roads, and pipelines for "NBU #920-20C, D, E, & F" and "NBU #920-29K, L, J, & O" (Sec. 20 & 29, T 9 S, R 20 E). The well pads and the associated access roads and pipelines covered in this report showed little to no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

Nevertheless, if any vertebrate fossil(s) are found during construction within the project area, recommendations are that a paleontologist is immediately notified in order to collect fossil materials in danger of being destroyed. Any vertebrate fossils found should be carefully moved outside of the construction areas to be check by a permitted paleontologist.

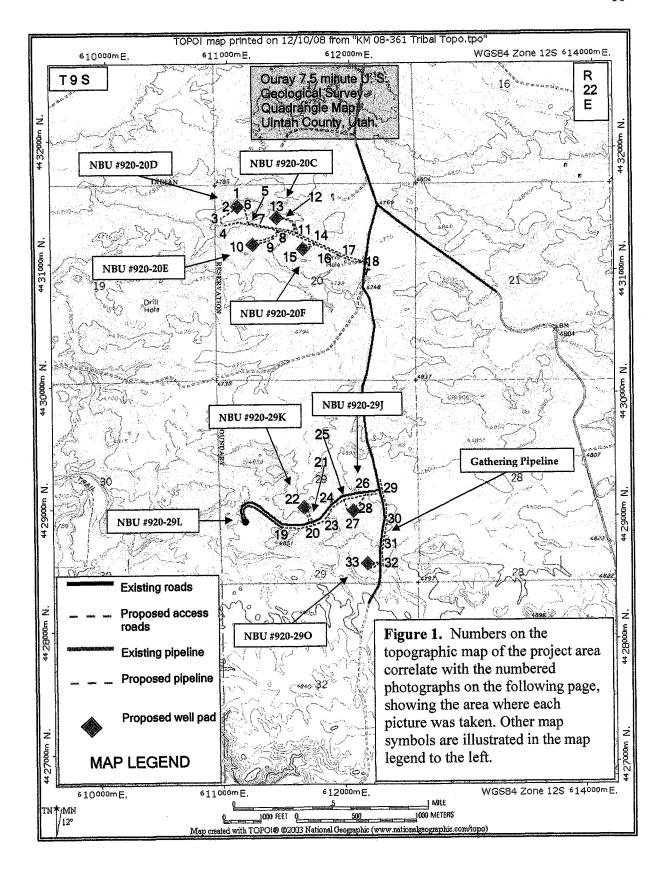


Figure 1. continued...

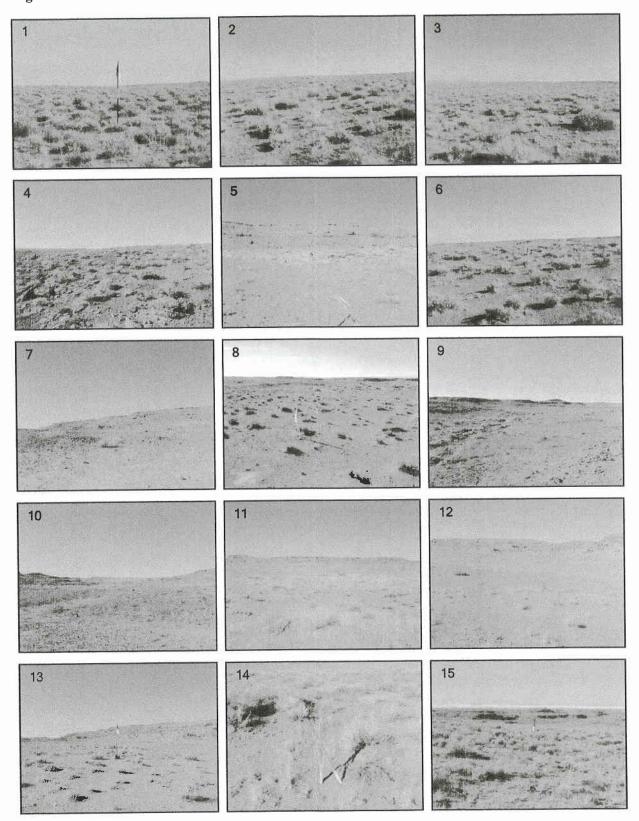


Figure 1. continued...

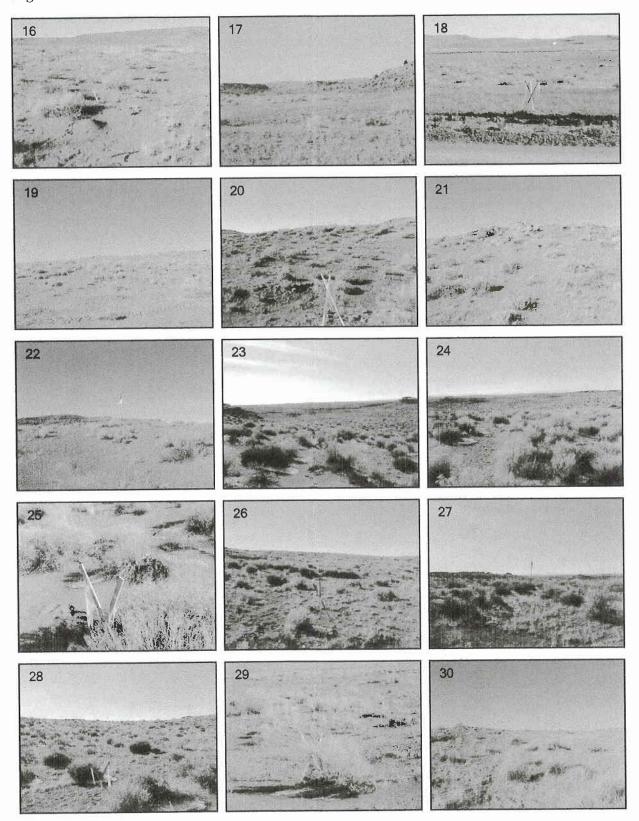
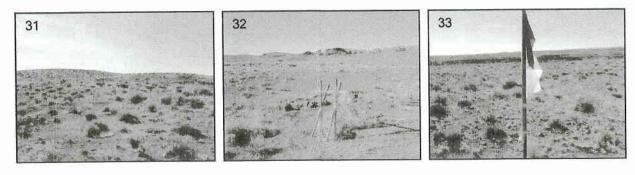


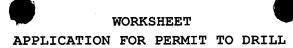
Figure 1. continued...



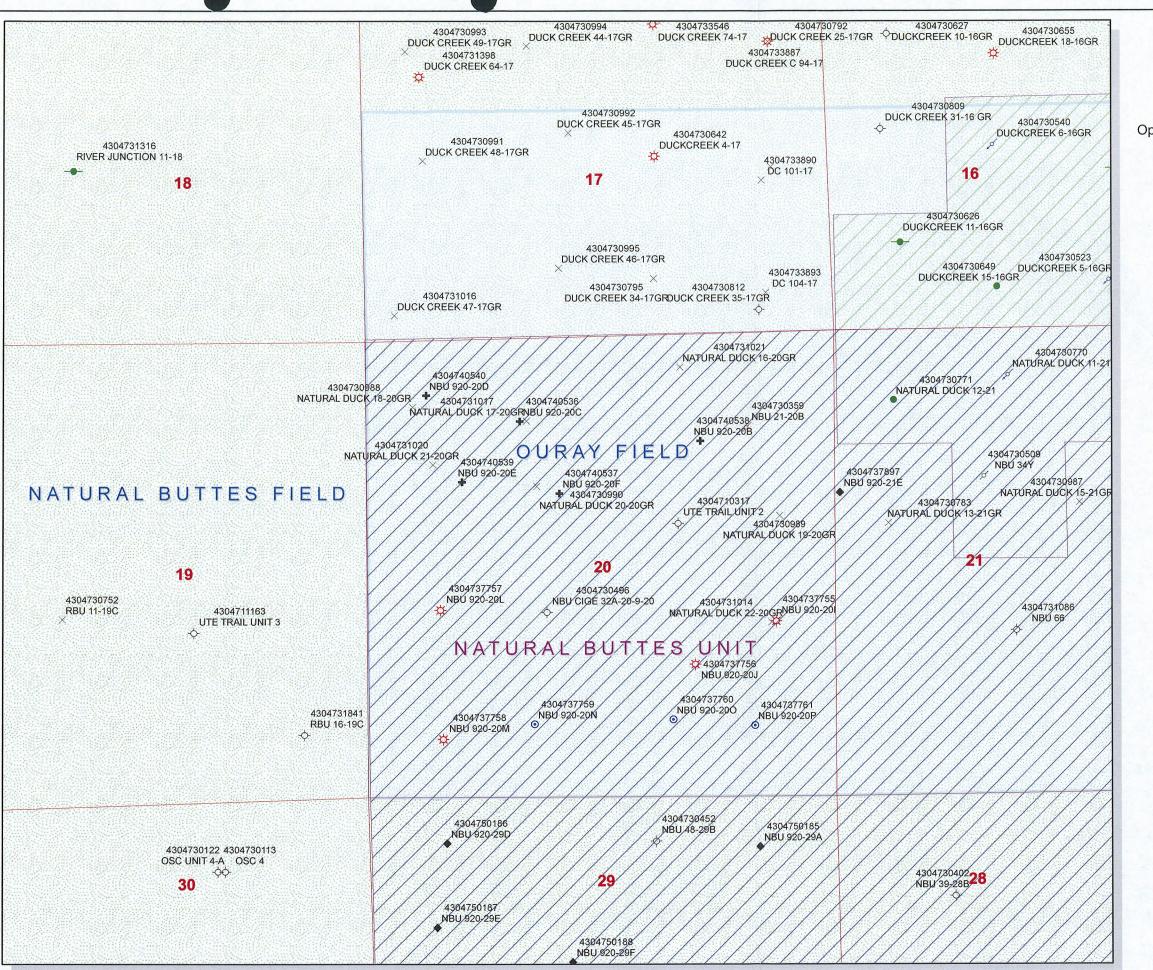
REFERENCES CITED

- Abbott, W., 1957, Tertiary of the Uinta Basin: Intermountain Assoc. Petroleum Geologists Guidebook, Eighth Ann. Field Conf., p. 102-109.
- Anderson, D. W., and Picard, M. D., 1972, Stratigraphy of the Duchesne River Formation (Eocene-Oligocene?), northern Uinta Basin, northeastern Utah: Utah Geological and Mineralogical Survey Bulletin 97, p. 1-28.
- Betts, C. W., 1871, The Yale College expedition of 1870: Harper's New Monthly Magazine, v. 43, p. 663-671.
- Black, C. C. and Dawson, M. R., 1966, A Review of Late Eocene Mammalian Faunas from North America: American Journal of Science, v. 264, p. 321-349.
- Bryant, B., Naeser C. W., Marvin R. F., Mahnert H. H., 1989, Cretaceous and Paleogene Sedimentary Rocks and Isotopic Ages of Paleogene Tuffs, Uinta basin, Utah. And Ages of Late Paleogene and Neogene Tuffs and the Beginning of Rapid Regional Extension, Eastern Boundary of the Basin and Range Province near Salt lake City, Utah: In: Evolution of Sedimentary basins-Uinta and Piceance Basins. U. S. Geological Survey Bulletin 1787-J, K.
- Flynn, J. J., 1986, Correlation and geochronology of middle Eocene strata from the western United States: Palaeogeographic, Palaeoclimatology, Palaeoecology, v. 55, p. 335-406.
- Hamblin, A. H. and Miller, W. E., 1987, Paleogeography and Paleoecology of the Myton Pocket, Uinta Basin, Utah (Uinta Formation-Upper Eocene): Brigham Young University Geology Studies, v. 34, p 33-60.
- Kay, J. L., 1934, Tertiary formations of the Uinta Basin, Utah: Annals of Carnegie Museum, v. 23, p. 357-371.
- Marsell, R. E., 1964, Geomorphology of the Uinta Basin-A Brief Sketch: Thirteenth annual Field Conference. Association of Petroleum Geologists, p. 34-46.
- Marsh, O. C., 1871, on the geology of the Eastern Uintah Mountains: American Journal of Science and Arts, v. 1, p. 1-8.
- 1875a, Ancient lake basins of the Rocky Mountain region: American Journal of Science and Arts, v. 9, p. 49-52.
- 1875b, Notice of new Tertiary mammals, IV: American Journal of Science and Arts, Third Series, v. 9, p. 239-250.

- Osborn, H. F., 1895, Fossil mammals of the Uinta beds, expedition of 1894: American Museum of Natural History Bulletin, v. 7, p. 71-106.
- 1929, The Titanotheres of Ancient Wyoming, Dakota and Nebraska: Monograph of the U. S. Geological Survey, v. 55, p. 1-953.
- Peterson, O. A., 1931c, new species from the Oligocene of the Uinta: Annals of Carnegie Museum, v. 21, p. 61-78.
- Peterson, O. A. and Kay, J. L., 1931, The Upper Uinta Formation of Northeastern Utah: Annals of the Carnegie Museum, v. 20, p. 293-306.
- Prothero, D. R., 1996, Magnetic Stratigraphy and biostratigraphy of the middle Eocene Uinta Formation, Uinta Basin, Utah, *in* Prothero, D. R., and Emry, R. J. editors, The Terrestrial Eocene-Oligocene Transition in North America, p. 3-24.
- Rasmussen, D. T., Conroy, G. C., Friscia, A. R., Townsend, K. E. and Kinkel, M. D., 1999, Mammals of the middle Eocene Uinta Formation: Vertebrate Paleontology of Utah, p. 401-420.
- Riggs, E. S., 1912. New or Little Known Titanotheres from the Lower Uintah Formations: Field Museum of Natural History Geological Series, v. 159, p. 17-41.
- Ryder, R. T., Fouch, T. D., Elison, J. H., 1976, Early Tertiary sedimentation in the western Uinta Basin, Utah: Geological Society of America Bulletin v. 87, p. 496-512.
- Scott, W. B., 1945, The Mammalia of the Duchesne River Oligocene: Transactions of the American Philosophical Society, v. 34, p. 209-253.
- Stucky, R. K., 1992, Mammalian faunas in North America of Bridgerian to early Arikareean "age" (Eocene and Oligocene), in Prothero, D. R., and Berggren, W. A., eds., Eocene-Oligocene climatic and biotic evolution: Princeton University Press, p. 464-493.
- Wood, H. E., 1934, Revision of the Hyrachyidaes: American Museum of Natural History Bulletin, v. 67, p. 181-295.
- and others, 1941, Nomenclature and Correlation of the North America Continental Tertiary: Geol. Soc. Amer. Bull., v. 52, no. 1, Jan. 1, p. 1-48. 52, no. 1, Jan. 1, p. 1-48.



APD RECEIVED: 02/17/2009	API NO. ASSIGNED: 43-047-40537
WELL NAME: NBU 920-20F OPERATOR: KERR-MCGEE OIL & GAS (N2995) CONTACT: RALEEN WHITE	PHONE NUMBER: 720-929-6666
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
SENW 20 090S 200E SURFACE: 1794 FNL 2199 FWL	Tech Review Initials Date
BOTTOM: 1794 FNL 2199 FWL	Engineering
COUNTY: UINTAH	Geology
LATITUDE: 40.02308 LONGITUDE: -109.6917 UTM SURF EASTINGS: 611641 NORTHINGS: 443092	Surface
FIELD NAME: NATURAL BUTTES (630) LEASE TYPE: 1 - Federal LEASE NUMBER: UTU-144867 SURFACE OWNER: 2 - Indian	PROPOSED FORMATION: WSMVD COALBED METHANE WELL? NO
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. WYB000291) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) RDCC Review (Y/N) (Date:) MUM Fee Surf Agreement (Y/N) NUM Intent to Commingle (Y/N)	LOCATION AND SITING:
STIPULATIONS: 1- tedno (1) 2- Oil	Start



API Number: 4304740537 Well Name: NBU 920-20F

Township 09.0 S Range 20.0 E Section 20

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared: Map Produced by Diana Mason







United States Department of the Interior

BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 2, 2009

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2009 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #

WELL NAME

LOCATION

(Proposed PZ Wasatch/MesaVerde)

```
NBU 920-290 Sec 29 T09S R20E 0746 FSL 2465 FEL
43-047-40553
             NBU 920-29L Sec 29 T09S R20E 1572 FSL 0754 FWL
43-047-40554
             NBU 920-29M Sec 29 T09S R20E 0159 FSL 0757 FWL
43-047-40555
             NBU 920-29I Sec 29 T09S R20E 2164 FSL 0400 FEL
43-047-40556
             NBU 920-29K Sec 29 T09S R20E 2208 FSL 2197 FWL
43-047-40557
             NBU 920-29P
                          Sec 29 T09S R20E 1038 FSL 0018 FEL
43-047-40558
                          Sec 29 T09S R20E 1977 FSL 1747
43-047-40559
             NBU 920-29J
43-047-40560
             NBU 920-29N Sec 29 T09S R20E 1254 FSL 2098 FWL
                          Sec 22 T09S R20E 0198 FSL 2487
43-047-40542
             NBU 920-220
             NBU 920-22K Sec 22 T09S R20E 2128 FSL 2497
43-047-40543
43-047-40544
             NBU 920-22I
                          Sec 22 T09S R20E 1965 FSL 0599 FEL
43-047-40545
             NBU 920-22J
                          Sec 22 T09S R20E 2086 FSL 1575
43-047-40538
             NBU 920-20B Sec 20 T09S R20E 1229 FNL 1580
43-047-40536
             NBU 920-20C
                          Sec 20 T09S R20E 0963 FNL 1754
             NBU 920-20F
                          Sec 20 T09S R20E 1794 FNL 2199
43-047-40537
             NBU 920-20E
                          Sec 20 T09S R20E 1644 FNL 1084 FWL
43-047-40539
             NBU 920-20D
                          Sec 20 T09S R20E 0646 FNL 0686 FWL
43-047-40540
             NBU 920-21J
                          Sec 21 T09S R20E 2346 FSL 1748 FEL
43-047-40541
43-047-40561
             NBU 920-32E
                          Sec 32 T09S R20E 2052 FNL 0707
             NBU 920-32K
                          Sec 32 T09S R20E 2095 FSL 1813 FWL
43-047-40562
             NBU 920-33D
                          Sec 33 T09S R20E 0821 FNL 0925 FWL
43-047-40567
             NBU 920-33L
                          Sec 33 T09S R20E 2299 FSL 0625 FWL
43-047-40568
             NBU 920-33E
                          Sec 33 T09S R20E 2079 FNL 0611 FWL
43-047-40574
43-047-40575
             NBU 920-33C
                          Sec 33 T09S R20E 0971 FNL 1851 FWL
```



43-047-40576 NBU 920-33F Sec 33 T09S R20E 2048 FNL 1845 FWL 43-047-40535 NBU 920-15PT Sec 15 T09S R20E 0591 FSL 0696 FEL

This office has no objection to permitting the wells at this time.

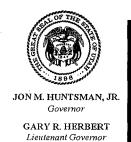
/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:3-2-09



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 2, 2009

Kerr-McGee Oil & Gas Onshore, LP P O Box 173779 Denver, CO 80217-3779

Re:

NBU 920-20F Well, 1794' FNL, 2199' FWL, SE NW, Sec. 20, T. 9 South, R. 20 East,

Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40537.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal Office



Operator:	Kerr-McGee Oil & Gas Onshore, LP		
Well Name & Number	NBU 920-20F		
API Number:	43-047-40537		
Lease:	UTU-144867		
Location: SE NW	Sec. 20	T. 9 South	R. 20 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

	STATE OF UTAH		FORM 9
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deeper Igged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 920-20F
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047405370000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENW Section: 20	IP, RANGE, MERIDIAN: Township: 09.0S Range: 20.0E Meridian:	: S	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & Ga extension to this A	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION MPLETED OPERATIONS. Clearly show all pe	e) respectfully requests an owed. Please contact the mments. Thank you.	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: Folumes, etc. Approved by the Utah Division of Oil, Gas and Mining ate: March 01, 2010 y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER		
SIGNATURE N/A	720 929-6156	Regulatory Analyst DATE 2/25/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requ

uire revi	sion. Following is a checklist of	some items related to the applicati	on, which should be verified.
	eted on private land, has the ow ed? 📗 Yes 🌘 No	nership changed, if so, has the sur	face agreement been
	any wells been drilled in the vici requirements for this location?	inity of the proposed well which we	ould affect the spacing or
	nere been any unit or other agre s proposed well? 🕡 Yes 🍺 I	ements put in place that could affe	ect the permitting or operation
	there been any changes to the a the proposed location? (Ye	ccess route including ownership, o s 📵 No	r rightof- way, which could
• Has th	ne approved source of water for	drilling changed? 📗 Yes 📵 No)
		s to the surface location or access seed at the onsite evaluation?	
• Is bor	nding still in place, which covers	this proposed well? Yes	Approved by the No Utah Division of Oil, Gas and Mining
nature:	Danielle Piernot Date	: 2/25/2010	
Title:	Regulatory Analyst Representing	: KERR-MCGEE OIL & GAS ONSHOR	March 01, 2010
			$II(I)I$, $\Delta \alpha = 0$

Sig

By: Dally

STATE OF UTAH		FORM 9	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen Igged wells, or to drill horizontal laterals. L		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 920-20F
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047405370000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHO treet, Suite 600, Denver, CO, 80217 3779	NE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL QTR/QTR, SECTION, TOWNSHI Otr/Otr: SENW Section: 20	I P, RANGE, MERIDIAN: Township: 09.0S Range: 20.0E Meridian:	S	COUNTY: UINTAH STATE: UTAH
11.			
CHE	CK APPROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION	_	TYPE OF ACTION	
✓ NOTICE OF INTENT	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start: 3/1/2011	☐ CHANGE TO PREVIOUS PLANS☐ CHANGE WELL STATUS	☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS	☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
_	PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL
☐ DRILLING REPORT	☐ WATER SHUTOFF	\square SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:
Kerr-McGee Oil & G extension to this A	as Onshore, L.P. (Kerr-McGee As Onshore, L.P. (Kerr-McGee APD for the maximum time allowith any questions and/or cor) respectfully requests an owed. Please contact the mments. Thank you.	Approved by the Utah Division of Oil, Gas and Mining ate: 03/01/2011 y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 3/1/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requ

uire revision. Following is a checklist of some items related to the application, which should be verified.
 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Danielle Piernot Date: 3/1/2011

Sig

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Form 3160-3 (August 2007)

UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT FEB 1 7 2009
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

ببنيت			
5.	Lease	Serial	No.

JTU-144867	0	144	^L X	6	

6. If Indian, Allottee or Tribe Name Ute Tribe 7. If Unit or CA Agreement, Name and No. X DRILL Type of Work: REENTER 891008900A 8. Lease Name and Well No. Type of Well: Oil Well X Gas Well Other Single Zone X Multiple Zone NBU 920-20F Name of Operator 9. API Well No. Kerr-McGee Oil & Gas Onshore, LP 43-047-40537 Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PO Box 173779 Raleen White Natural Buttes Field Denver, CO 80217-3779 720-929-6666 Location of well (Report location clearly and In accordance with any State requirements.*) NAD 83 11. Sec., T., R., M., or Blk.and Survey Area At surface 1,794' FNL 2,199' FWL SE/4 NW/4 40.02316 -109.69245 20 T 98 R 20E S.L.B. & M. At proposed prod. zone 14. Distance in miles and direction from the nearest town or post office* 12. County or Parish 13. State Approximately 35 miles south of Vernal, Utah Uintah Utah 15. Distance from proposed* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest 1,794 property or lease line, ft. 80.00 Unit well (Also to nearest drlg. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/ BIA Bond No. on file to nearest well, drilling, completed, 1,000' 10,800 WYB000291 applied for, on this lease, ft. 21. Elevations (Show whether DF. RT, GR, etc.) 22. Aproximate date work will start* 23. Estimated duration 4,766 ' GR KB ASAP 10 days 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by existing bond on file(see item 20 above).
- Operator certification.
- Such other site specific information and/ or plans as may be required by the a authorized officer.

Title Sr Regulatory Analyst	E-mail:	raleen.white@anadarko.com
Approved By (Signature)	Phone:	720-929-6666 Date 4144 2 2 2014
In Kengh	Name (Printed/ Typed Gerry Kenczka	Date JUN 2 1 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OF	FICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its juridiction.

* (Instructions on page 2)

UDOGM

NOTICE OF APPROVAL

JUL 1 11/10/S apad posted 2/19/00

DIV. OF OIL, GASA FINASS# <u>IR/M 8/82/</u>

CONDITIONS OF APPROVAL ATTACHED



UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Kerr McGee Oil & Gas Onshore LP	Location:	SENW, Sec. 20, T9S R20E
Well No:	NBU 920-20F	Lease No:	UTU-0144867
API No:	43-047-40537	Agreement:	Natural Buttes

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	THE PERSON NAMED IN COLUMN	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)		Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	1000000000	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 8 Well: NBU 920-20F

6/16/2011

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

Site Specific Conditions of Approval:

- Paint facilities "Shadow Gray."
- Monitor construction by a permitted archaeologist.
- Construct low-water crossings on access road at ephemeral drainages.
- Construct gathering line underground (bury pipeline) in drainages/washes using guidelines from the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM 2007).
- Conduct a raptor survey prior to initiating any surface disturbance activity, including construction
 of the proposed location, pipeline, or access road, or drilling or completion operation in any such
 operation would take place during the raptor nesting season (January 1 through September 30).
 If an active raptor nest is identified during a survey, conduct the construction, drilling, and/or
 completion operation according to the seasonal restriction detailed in the Uinta Basin-specific
 RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines. (See
 Appendix D).
- Conduct a new biological survey in accordance with the guidelines specified in the USFWS
 Rare Plant Conservation Measurements for Uinta Basin Hookless cactus and the 2008 BLM
 RMP ROD, to include a 300-foot buffer from proposed construction operations (See Appendix
 D) and conduct operations according to agency specifications and the requirements of the BO
 issued as a result of Section 7 USFWS consultation.

BIA Standard Conditions of Approval:

- Soil erosion will be mitigated by reseeding all disturbed areas.
- The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
- An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations
 of this document and in the Application for Permit to Drill. A closed drilling system shall be used

Page 3 of 8 Well: NBU 920-20F 6/16/2011

in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.

- The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
- A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
- Major low water crossings will be armored with pit run material to protect them from erosion.
- All personnel should refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.
- If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.
- Before the site is abandoned the company will be required to restore the right-of-way to near its
 original state. The disturbed area will be reseeded with desirable perennial vegetation. If
 necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable
 seed mixture.
- Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
- If project construction operations are scheduled to occur after December 31, 2009, KMG should conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002. If active raptor nest are indentified during a new survey, KMG should conduct its operations according to the seasonal restrictions detailed in the Uinta basin-specific RMP guidelines and spatial offsets specified by the USFWS Utah Raptor Guidelines (See Appendix D).
- USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix D).
- All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

Page 4 of 8 Well: NBU 920-20F 6/16/2011

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Surface casing cement shall be brought up and into the surface. Top of Cement is to reach surf. For surface casing cement program, to reach surface with Top of Cement, operator is required to pump additional cement beyond the stated amounts in application.
- The operator must notify any active gilsonite operation located within 2 miles of the location 48 hours prior to any surface blasting for this well.
- Conductor casing shall be set into competent formation.

toc_1800_operDrlgPlan#4 CsgSurf_set_2700 to 2800 KerrMcGee apd_coa Downhole

 Production casing cement shall be brought up and into the surface casing. Production casing minimum cement top is 1800 ft. The minimum cement top is approximately 0700 ft above the surface casing shoe.

Cement Top (TOC) standard will place cement behind casing across formation lost circulation zone, Birds Nest Zone.

Surface casing setting depth stated in APD is 2700 to 2800 ft.

COA specification fulfills operators performance standard stated in APD (where operators toc is calculated with an excess to reach surface).

- Operator is to notify BLM Vernal Field Office and active gilsonite mining operator (or lease holder) located within a 2 mile radius, 48 hours prior to pad explosives blasting. Well is not close to gilsonite vein, but on trend to gilisonite vein deposits.
- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Drilling plan specifics and practices are referenced in the Kerr McGee Oil & Gas Standard
 Operating Procedures (SOP version: July 28, 2008). The operators drilling plan items 3 to 9
 reference the SOP. Kerr McGee shall adhere to the referenced requirements in the SOP.
 Kerr McGee and their contractors shall adhere to all Oil and Gas rules and requirements listed
 in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders except where
 variances have been granted.
- Covering air/gas drilling operations, requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- A Gamma Ray well Log shall be run from the well Total Depth to the surface.
 A copy of the Gamma Ray well Log shall be submitted to the BLM Vernal Field Office.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 45 feet.
 All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E.1. Drilling Operations, Special Drilling Operations, air/gas drilling.

Page 5 of 8 Well: NBU 920-20F 6/16/2011

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
 daily drilling report. Components shall be operated and tested as required by Onshore Oil &
 Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
 performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
 reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
 is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
 Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum

Page 6 of 8 Well: NBU 920-20F 6/16/2011

Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 7 of 8 Well: NBU 920-20F 6/16/2011

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written
 communication and must be received in this office by not later than the fifth business day
 following the date on which the well is placed on production. The notification shall provide, as a
 minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

Page 8 of 8 Well: NBU 920-20F 6/16/2011

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
 Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
 and all future meter proving schedules. A copy of the meter calibration reports shall be
 submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
 standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
 measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
 to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
 first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
 adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
 sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior
 approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
 before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 23772 API Well Number: 43047405370000

	STATE OF UTAH		FORM 9
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867
SUNDF	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 920-20F
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047405370000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 20 Township: 09.0S Range: 20.0E Meridia	an: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G an extension to this	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show all Sas Onshore, L.P. (Kerr-McGee APD for the maximum time a with any questions and/or continuous contin	e) respectfully requests llowed. Please contact	Approved by the
NAME (PLEASE PRINT)	PHONE NUMBE	R TITLE	
Danielle Piernot	720 929-6156	Regulatory Analyst	
SIGNATURE N/A		DATE 3/7/2012	

Sundry Number: 23772 API Well Number: 43047405370000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No	
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? (Yes (No	g
 Has there been any unit or other agreements put in place that could affect the permitting or operation proposed well? Yes No 	of thi
 Have there been any changes to the access route including ownership, or rightof- way, which could af proposed location? Yes No 	fect th
• Has the approved source of water for drilling changed? 🔘 Yes 🌘 No	
 Have there been any physical changes to the surface location or access route which will require a char plans from what was discussed at the onsite evaluation? Yes No 	ige in
• Is bonding still in place, which covers this proposed well? 🌘 Yes 🔘 No	
nature: Danielle Piernot Date: 3/7/2012	

Sig

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 34772 API Well Number: 43047405370000

	STATE OF UTAH		FORM 9		
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867		
			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 920-20F				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	9. API NUMBER: 43047405370000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHO n Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: 20 Township: 09.0S Range: 20.0E Meridian:	S	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
7	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
3/2/2013	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	✓ APD EXTENSION		
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12 DESCRIPE PROPOSED OR		ortinant dataila including datas, d	denthe volumes etc		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you. Approved by the Utah Division of Oil, Gas and Mining					
			Date: February 19, 2013		
			By: Bacylll		
NAME (PLEASE PRINT) Luke Urban	PHONE NUMBER 720 929-6501	TITLE Regulatory Specialist			
SIGNATURE		DATE			
N/A		2/15/2013			

Sundry Number: 34772 API Well Number: 43047405370000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? (Yes (No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Luke Urban Date: 2/15/2013

Sig

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 45635 API Well Number: 43047405370000

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867		
SUNDF	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
Current bollom-noie debin-teenier billdded wells- of 10 drill hoffzonial faletais. Use APPLICATION I			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 920-20F				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.			9. API NUMBER: 43047405370000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 20 Township: 09.0S Range: 20.0E Meridi	ian: S	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
Kerr-McGee Oil & G an extension to this	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show a Gas Onshore, L.P. (Kerr-McGe APD for the maximum time a with any questions and/or co	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: Depths, volumes, etc. Approved by the Utah Division of Oil, Gas and Mining Date: December 09, 2013 By:			
NAME (PLEASE PRINT)	PHONE NUMBE	ER TITLE			
Teena Paulo	720 929-6236	Staff Regulatory Specialist			
SIGNATURE N/A		DATE 12/5/2013			

Sundry Number: 45635 API Well Number: 43047405370000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? (Yes (No
• Has the approved source of water for drilling changed? 🔘 Yes 🌘 No
• Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Teena Paulo Date: 12/5/2013

Sig

Title: Staff Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 60590 API Well Number: 43047405370000

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-144867		
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 920-20F				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.			9. API NUMBER: 43047405370000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 73779 720 929-	9. FIELD and POOL or WILDCAT: 1NATERAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1794 FNL 2199 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 20 Township: 09.0S Range: 20.0E Merio	dian: S	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
7	ACIDIZE	ALTER CASING	CASING REPAIR		
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
2/6/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION		
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates, o	depths, volumes, etc.		
Kerr-McGee Oil & (Gas Onshore L.P. respectfull	y requests an extension	Approved by the		
	the maximum time allowed.		ՄեebrDåvi sն9դ 2 1015 Oil, Gas and Mining		
undersigned wi	th any questions and/or con	nments. Thank you.	On, Gas and Mining		
			Date:		
			By: Dangell		
NAME (PLEASE PRINT)	PHONE NUMB	BER TITLE			
Joel Malefyt	720 929-6828	Regualtory Analyst			
SIGNATURE N/A		DATE 2/6/2015			

Sundry Number: 60590 API Well Number: 43047405370000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047405370000

API: 43047405370000 Well Name: NBU 920-20F

Location: 1794 FNL 2199 FWL QTR SENW SEC 20 TWNP 090S RNG 200E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/2/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on pri	vate land, has the ownership changed, if so, has the surface agreement been updated?
	peen drilled in the vicinity of the proposed well which would affect the spacing or siting this location? (Yes (No
	any unit or other agreements put in place that could affect the permitting or operation of the
	any changes to the access route including ownership, or rightof- way, which could affect then? Yes No
• Has the approv	d source of water for drilling changed? 🔘 Yes 🌘 No
	any physical changes to the surface location or access route which will require a change in was discussed at the onsite evaluation? Yes No
• Is bonding still	n place, which covers this proposed well? 🌘 Yes 💭 No
nature: Joel Malef	t Date : 2/6/2015

Sig

Title: Regualtory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Green River District Vernal Field Office 170 South 500 East Vernal, UT 84078

http://www.blm.gov/ut/st/en/fo/vernal.html





Ashley Cocciolone Kerr McGee Oil & Gas Onshore LP 1099 18th Street, Suite 600 Denver, CO 80202

RECEIVED

AUG 0 3 2015

DIV. OF OIL, GAS & MINING

Dear Ashley:

The referenced Applications for Permit to Drill (APD) have expired. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced applications has expired. If you intend to drill at these locations in the future, a new Application for Permit to Drill must be submitted.

43-047

Lease	Well		Aliquot	Sec., T., R.	Date Rec'd	Date Exp'd
UTU-0144867	NBU 920-20C	40536	NENW	Sec. 20-T9S-R20E	2/17/2009	6/21/2015
UTU-0144867	NBU 920-20F	501887	ENW	Sec. 29-T9S-R20E	2/17/2009	6/21/2015
UTU-466	NBU 1022-7N1S	50650	SWSE	Sec. 7-T10S-R22E	8/14/2009	6/9/2015
UTU-466	NBU 1022-7N4S	50651	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-466	NBU 1022-704AS	50652	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-466	NBU 1022-704DS	50653	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-60747	Archee 1-228	34737	Lot 1	Sec. 1-T9S-R20E	9/20/2002	2/10/2005

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved location of these wells is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

If you have any questions regarding this matter, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

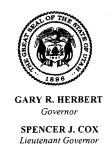
/s/ Jerry Kenczka

Jerry Kenczka
Assistant Field Manager
Lands & Mineral Resources

cc: UDOGM

bcc: Well File

I&E Asst.



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

May 5, 2016

Kerr-McGee Oil & Gas Onshore, LP. 1099 18th Street, Suite 600 Denver, CO 80217

Re:

<u>APD Rescinded – NBU 920-20F, Sec. 20, T.9S, R.20E</u>

Uintah County, Utah API No. 43-047-40537

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 2, 2009. On March 1, 2010, March 1, 2011, March 12, 2012, February 19, 2013, December 9, 2013 and February 9, 2015 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective May 5, 2016.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc: Well File

Bureau of Land Management, Vernal

